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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,838	07/11/2001	John Stewart Denker	2000-0300	9503

7590 08/19/2004  
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EXAMINER

LEE, BENJAMIN C

ART UNIT PAPER NUMBER

2632

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/902,838

Applicant(s)

DENKER ET AL.

Examiner

Benjamin C. Lee

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/11/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2632

## DETAILED ACTION

### Claim Status

1. Claims 1-49 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (US pat. #5,845,227).

#### 1) In considering claim 1:

Peterson discloses a method of determining travel time of a mobile user having a cellular phone over one or more route segments by detecting the elapsed time of hand-offs from cell to cell in a cellular phone system (col. 4, lines 32-50 and col. 7, lines 54-56), whereby the determination could be done by the central computer or by the mobile cell phone itself (col. 9, lines 4-6, 13-18 and 37-38).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that when such method of determining travel elapsed time over one or more route segments using the teachings by Peterson is done by a mobile cell phone, the hand-off detection from cell to cell in the cellular telephone system and calculating elapsed time at the mobile cell phone would have been done by decoding a first unique identifier for a cell in communication with a mobile station at a first location and a first time; storing the first unique identifier and the

Art Unit: 2632

first time; decoding, upon handoff to a next cell, at a second location and at a second time, a second unique identifier for the next cell; and storing the second unique identifier and the second time, whereby such a method constitutes a training method for a mobile station location identification system.

2) In considering claim 2, Peterson renders all of the claimed subject matter obvious as in claim 1, including:

--the claimed calculating a travel time for travel between the first location and the second location comprising subtracting the second time from the first time to yield the travel time is met by the "elapsed time" calculation for a route segment having a beginning first location and a second ending location of the route segment of Peterson.

3) In considering claim 3, Peterson renders all of the claimed subject matter obvious as in claim 2, including:

--the claimed storing the travel time for travel between the first and second locations (col. 4, lines 13-2, 50-54 and 62-64; col. 5, lines 22-25; col. 9, lines 48-51).

4) In considering claim 4, Peterson renders all of the claimed subject matter obvious as in claim 3, wherein:

Since Peterson discloses that the route segments defined/bounded by endpoints called nodes or waypoints used in route guidance and other navigation related applications (col. 4, line 45; col. 9, lines 42-47 and 57-58) and indexing route guidance and navigational information using segment nodes are well-known and convention in the art, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to index such stored time to a

segment bounded by the first and second locations in a method/system such as taught by Peterson to facilitate processing associated with route guidance and navigation.

5) In considering claims 5-6, Peterson renders all of the claimed subject matter obvious as in claim 1, whereby:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the unique identifiers for determining hand-offs from cell to cell in a cellular telephone system of Peterson include Cell Tower Identification Numbers and/or Base Station Identifiers.

6) In considering claim 7, Peterson renders all of the claimed subject matter obvious as in claim 3, wherein:

While Peterson discloses storing the travel time in the central computer so that the central computer uses such information to calculate minimum travel time and route for other users or other occasions and distribute such information back to individual mobile users based on intended route inputs, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to store such travel time in the mobile station (cellular phone device onboard the vehicle 14) in a system such as taught by Peterson in order to reduce or eliminate the processing burden at the central computer by distributing at least some of the processes including such travel time storage to the mobile stations thereby allowing a central computer implementation that is less burdened for faster processing or reducing/eliminating the processing capacity requirements and associated costs of the central computer.

7) In considering claim 8, Peterson renders all of the claimed subject matter obvious as in claim 3, wherein:

Since Peterson discloses storing the travel time of a large number of vehicles and route segments in the central computer (col. 3, lines 24-34 and col. 9, lines 23-28 and 48-52), it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to store such travel time in a central server database in a system such as taught by Peterson in order to accommodate large amount of data associated with such large number of vehicles and route segments in an effective and efficient manner.

8) In considering claim 9, Peterson renders all of the claimed subject matter obvious as in claim 1, wherein:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include a “delete” function in the mobile station to allow deletion of the stored travel time by activating a signal from the mobile station in a system such as taught by Peterson, in order to grant a user the option to delete any useless, outdated, inaccurate, or otherwise personal/confidential stored travel time and related information the wished to delete.

9) In considering claims 10 and 17, Peterson renders all of the claimed subject matter obvious as in the consideration of claim 8, wherein:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include transmission from the mobile station to the central server database the first and second unique identifiers in a method/system such as taught by Peterson when travel time determination is done at the central computer.

10) In considering claim 11, Peterson renders all of the claimed subject matter obvious as in claim 10, plus the consideration of claim 2.

Art Unit: 2632

11) In considering claim 12, Peterson renders all of the claimed subject matter obvious as in claim 11, plus the consideration of claim 3.

12) In considering claim 13, Peterson renders all of the claimed subject matter obvious as in claim 12, plus the consideration of claim 4.

13) In considering claims 14-15, Peterson renders all of the claimed subject matter obvious as in claim 10, plus the consideration of claims 5-6, respectively.

14) In considering claim 16, Peterson renders all of the claimed subject matter obvious as in claim 10, plus the consideration of claim 7.

15) In considering claim 17, Peterson renders all of the claimed subject matter obvious as in claim 10, plus the consideration of claim 8.

16) In considering claim 18, Peterson renders all of the claimed subject matter obvious as in claim 10, plus the consideration of claim 9.

17) In considering claim 19, Peterson renders all of the claimed subject matter obvious as in the consideration of claim 12, including:

--the claimed intended use of and additional steps for calculating an estimated time of arrival of the mobile station using the stored calculated travel time of road segments is met/suggested by col. 4, lines 13-16; col. 5, lines 22-24; col. 10, lines 8-10.

18) In considering claim 20, Peterson renders all of the claimed subject matter obvious as in claim 19, plus the consideration of claim 16.

19) In considering claim 21, Peterson renders all of the claimed subject matter obvious as in claim 19, plus the consideration of claim 17.

Art Unit: 2632

20) In considering claims 22-23, Peterson renders all of the claimed subject matter obvious as in claim 19, plus the consideration of claims 20-21, respectively, whereby:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to calculate the estimated time of arrival of the mobile station at the endpoint of the segment in a system/method of Peterson either at the mobile station or at the server for the embodiments having the database located at the mobile station or at the server, respectively.

21) In considering claims 24-26, Peterson renders all of the claimed subject matter obvious as in claim 19, wherein:

Since Peterson discloses using historical data including variance due to time of day, day of the year, etc. (col. 9, line 48 to col. 10, line 10) in the calculation of the estimated time of arrival, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that such historical data and associated estimated time calculation in a system/method such as taught by Peterson involves, constitutes or includes statistical data.

22) In considering claim 27, Peterson renders all of the claimed subject matter obvious as in the consideration of claim 19.

23) In considering claim 28, Peterson renders all of the claimed subject matter obvious as in claim 27, plus the consideration of claim 20.

24) In considering claim 29, Peterson renders all of the claimed subject matter obvious as in claim 27, plus the consideration of claim 21.

25) In considering claims 30-31, Peterson renders all of the claimed subject matter obvious as in claim 27, plus the consideration of claims 22-23, respectively.



26) In considering claims 32-34, Peterson renders all of the claimed subject matter obvious as in claim 27, plus the consideration of claims 24-26.

27) In considering claim 35, Peterson renders all of the claimed subject matter obvious as in the consideration of claim 19.

28) In considering claim 36, Peterson renders all of the claimed subject matter obvious as in claim 35, plus the consideration of claim 20.

29) In considering claim 37, Peterson renders all of the claimed subject matter obvious as in claim 35, plus the consideration of claim 21.

30) In considering claims 38-39, Peterson renders all of the claimed subject matter obvious as in claim 35, plus the consideration of claims 22-23, respectively.

31) In considering claim 40, Peterson renders all of the claimed subject matter obvious as in the consideration of claims 1-4 and 19, including:

--the claimed calculating an approximate location of the mobile station traveling a recurrent route of travel based on the geography of the recurrent route and a travel time from the first time at which the start point of one of a plurality of route segments (col. 3, line 66 to col. 4, line 3; col. 4, lines 13-16 and 24-26).

32) In considering claims 41-42, Peterson renders all of the claimed subject matter obvious as in claim 40, plus the consideration of claims 20-21, respectively, whereby:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to calculate the estimated time of arrival and associated estimated location of the mobile station in a system/method of Peterson either at the mobile station or at the server for the embodiments having the database located at the mobile station or at the server, respectively.

Art Unit: 2632

33) In considering claims 43-45, Peterson renders all of the claimed subject matter obvious as in the consideration of claims 10-13 and 40.

34) In considering claims 46-49, Peterson renders all of the claimed subject matter obvious as in the consideration of claims 43-45.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) US pats. 5659596, 6757545, 6385458, 5873030, 6516195, 6711408, 6167274, 6385454, 6507569, 6424837, 5634206


--Similar cellular systems with known base/tower identifier detection in cell hand-offs with location and/or time stamping.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (703) 306-4223. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2632

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Benjamin C. Lee  
Primary Examiner  
Art Unit 2632

B.L.